

# **Documentation of statistics for Road Traffic Accidents 2014**



#### 1 Introduction

The purpose of the statistics is to collect and publish information on road traffic accidents in order to create a basis of knowledge for making decisions that can reduce the number of road traffic accidents and the consequences thereof. The statistics on road traffic accidents originate from 1 January 1930. The source of the statistics has until 1 January 2003 been the temporary and final reports from the police. From this date Statistics Denmark only receives an annual extract from the Road Directory with the police's final reports. Apart from this, the most fundamental alterations that have been introduced concern the classification of accidents, the scope of the statistics and the actual reporting procedures.

Until 1938, the classification of accidents was not unambiguous. From 1938 to 1966, accidents were categorized according to the main cause of the accident, which was determined by a legal judgement. From 1967 onwards, this judgement has been replaced by a classification of the accident, which is not based on the concept of blame, but on the actual description of the circumstances surrounding the accident.

From 1930 to 1958, the statistics included accidents resulting in personal injury as well as damage to property. Since 1958, accidents involving only damage to property are no longer covered by the statistics, and from 1967 accidents involving only pedestrians are no longer covered either, whether the accident resulted in a casualty or not.

Up until and including 1975, the police reports were sent straight to Statistics Denmark. In 1976, the reporting system was expanded, so that the highway authorities in counties and municipalities take part in the reporting by locating the accidents. As from November 1997 and up to and including April 2000, a new system of computerized reporting was gradually introduced in the police.

Since 1 January 2003 the police reports have been sent to the Road Directorate from whom Statistics Denmark receives an annual extract.

## 2 Statistical presentation

The statistics on road traffic accidents illustrate the extent and the nature of all accidents involving casualties, who are known by the police. The information on road traffic accidents is classified into three main groups: information about the accident, information about the element (vehicles, pedestrians and obstacles) and information about the person.

## 2.1 Data description

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## 2.2 Classification system

Groupings and descriptions.

## 2.3 Sector coverage

Administrative.



### 2.4 Statistical concepts and definitions

Injury: Injured or killed by road traffic accidents to the extent of all accidents, who are known by the police.

There are 3 categories:

- 1. Deaths by the accident or within a period of 30 days at the hospital.
- 2. Accidents involving serious personal injury reported by the police.
- 3. Accidents involving slight injuries are reported.

Under influence of alcohol: Under influence of alcohol - the level of alcohol in the blood should be above 0,050 promille.

### 2.5 Statistical unit

- · Injured persons
- · Number of element in traffic accidents with injured persons
- · Number of traffic accidents

#### 2.6 Statistical population

All accidents involving casualties which are known by the police constitute the population

#### 2.7 Reference area

Denmark.

#### 2.8 Time coverage

1993-

## 2.9 Base period

Not relevant for these statistics.

#### 2.10 Unit of measure

- · Injured persons
- · Number of element in traffic accidents with injured persons
- · Number of traffic accidents

## 2.11 Reference period

01-01-2014 - 31-12-2014

## 2.12 Frequency of dissemination

- Monthly publication of provisional data (until 1 January 2003).
- Quarterly publication of final data (until 1 January 2003).
- · Annual publication of final data.



## 2.13 Legal acts and other agreements

The information is collected in accordance with the Act on Statistics Denmark (Lov om Danmarks Statistik), Section 6, cf. Order no. 599 of 22 June 2000.

Council Decision (93/704/EC) of 30 November 1993 on the creation of a Community database on road accidents.

## 2.14 Cost and burden

There is no response burden as the data are collected by the police.

#### 2.15 Comment

Statbank. See under living conditions.

## 3 Statistical processing

Annual extract from the Road Directorate, Road Accident Information System with information for all accidents with injured.

The data is checked for errors. Only few corrections is made. No seasonally adjustment is made.

#### 3.1 Source data

Until 1. January 2003:

- Police reports on road traffic accidents with casualties which are part of the original police report.
- Since 1. January 2003:
- Annual extract from the Road Directorate, Road Accident Information System.

## 3.2 Frequency of data collection

Yearly.

#### 3.3 Data collection

Register.

### 3.4 Data validation

The data is checked for errors. Only few corrections is made.

## 3.5 Data compilation

Not relevant for these statistics.



### 3.6 Adjustment

Not relevant for these statistics.

#### 4 Relevance

- National users: Ministries (primarily the Ministry of Traffic), the police districts, the highway
  authorities in counties and municipalities, organizations, research centers, the education
  system and private persons.
- Eurostat: The register is made anonymous and sent to Eurostat, as input for the Community Database on Accidents on the Roads in Europe (CARE).
- Area of application: Local and central planning aimed at reducing road traffic accidents, education, research and public debate.

#### 4.1 User Needs

- National users: Ministries (primarily the Ministry of Traffic), the police districts, the highway
  authorities in counties and municipalities, organizations, research centers, the education
  system and private persons.
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#### 4.2 User Satisfaction

The users is asked to give their rating by a scheme after the deliverance of data/statistics. In general the costumers i satisfaction is high.

### 4.3 Data completeness rate

Not relevant for these statistics.

## 5 Accuracy and reliability

A general problem concerning the road traffic accident statistics is that they do not include accidents involving casualties, which are not reported to the police. The severity of the accident and the mode of transport are factors, which influence whether the police are involved. Examinations - pooling with the Register of Causes of Death and with registries of casualty award visits and hospital admissions caused by road traffic accidents - have proven that almost all accidents involving deaths are reported. Accidents involving serious personal injury are more frequently reported than accidents involving only slight injuries. Furthermore, accidents involving cars are more frequently reported than accidents involving bicycles and mopeds. In average only 20 per cent of the casualties come to the knowledge of the police. Results of the pooling with registries of casualty award visits can be found in the table MOERKE in <a href="Statbank">Statbank</a>.



### 5.1 Overall accuracy

The reliability of the road traffic accident statistics is estimated as solid. Both in the paper system and in the new electronic system the police report the information to Statistics Denmark/the Road Directorate while filling in the police report. That way Statistics Denmark's information on road traffic accidents involving casualties is as close to that of the police information as possible.

The number of road traffic accidents involving casualties who is registered by the police and thereby by Statistics Denmark/the Road Directorate is highly underestimated in proportion to the actual number. In average only 20 per cent of the casualties come to the knowledge of the police.

### 5.2 Sampling error

Not relevant for these statistics.

### 5.3 Non-sampling error

Not relevant for these statistics.

## 5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

### 5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.



### 5.6 Quality assessment

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The number of road traffic accidents involving casualties who is registered by the police and thereby by Statistics Denmark/the Road Directorate is highly underestimated in proportion to the actual number.

The reason is that the road traffic accident statistics do not include accidents involving casualties, which are not reported to the police. The severity of the accident and the mode of transport are factors, which influence whether the police are involved. Examinations - pooling with the Register of Causes of Death and with registries of casualty award visits and hospital admissions caused by road traffic accidents - have proven that almost all accidents involving deaths are reported. Accidents involving serious personal injury are more frequently reported than accidents involving only slight injuries. Furthermore, accidents involving cars are more frequently reported than accidents involving bicycles and mopeds. In average only 20 per cent of the casualties come to the knowledge of the police.

#### 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

#### 5.8 Data revision practice

The provisional monthly account differs slightly from the final annual account of accidents, casualties, deaths and injuries. In 2002, the final number of accidents was 0.4 per cent less than the provisional figure. The final figures for the number of injuries and deaths were 0.3 per cent more and 0.9 per cent less, respectively, than the provisional figures.

Since 1 January 2003 only final statistics is published.

### 6 Timeliness and punctuality

The statistics are usually published without delay in relation to the scheduled date - ult. June after the year after.

#### 6.1 Timeliness and time lag - final results

The annual statistics are published within 6 months of the census date.

#### 6.2 Punctuality

The statistics are usually published without delay in relation to the scheduled date.



## 7 Comparability

These include changes in the registration of road traffic accidents resulting in inconsistencies of data as well as the introduction of new variables. Since 1958, accidents involving only damage to property have been omitted from the statistics. In January 1967, the definition of road traffic accident involving casualties was changed to include only accidents involving at least one vehicle. This leaves out accidents involving only pedestrians. From January 1967, the classification of accidents according to main and secondary causes was changed to a classification according to the accident situation, based on an objective evaluation of the course of events leading up to the accident. In January 1981, the definition of slightly injured was changed. Minor bruises, scrapes and the like are no longer considered as slight injuries. In January 1983, the structure and contents of the statistical system were changed. New parameters - e.g., cycle paths, collision point, maneuver concerning the element record, and on driving license and moped license - were introduced. From January 1997, individuals who are admitted to hospital for observation due to concussion should be registered as slightly injured in cases where the diagnosis does not turn out to be concussion of the brain.

Legal changes, such as the introduction of and changes to speed limits and limits for level of alcohol in the blood, and requirements concerning the use of seat belts, helmets, child seats, lights, etc., can influence the overall development in the road traffic accident statistics.

## 7.1 Comparability - geographical

No comments.

### 7.2 Comparability over time

Changes in the register: These include changes in the registration of road traffic accidents resulting in inconsistencies of data as well as the introduction of new variables.

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  include only accidents involving at least one vehicle. This leaves out accidents involving only
  pedestrians.
- From January 1967, the classification of accidents according to main and secondary causes was changed to a classification according to the accident situation, based on an objective evaluation of the course of events leading up to the accident. In January 1981, the definition of slightly injured was changed. Minor bruises, scrapes and the like are no longer considered as slight injuries.
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*Legal changes*: Legal changes, such as the introduction of and changes to speed limits and limits for level of alcohol in the blood, and requirements concerning the use of seat belts, helmets, child seats, lights, etc., can influence the overall development in the road traffic accident statistics.

*Inconsistencies in time series*: No data on road traffic accidents are available for the years 1944-45, since the police were non-operative in part of this period.



#### 7.3 Coherence - cross domain

In addition to the account of deaths in road traffic accidents from the road traffic accident statistics, the Vital Statistics on death by cause of death also contain figures on the number of deaths in road traffic accidents. The two accounts are not directly comparable, as different methods of counting are used. In the Road Traffic Accident Statistics, only persons who have been involved in a road traffic accident in Denmark, on a public road and who have died within 30 days of the accident are counted as having been killed in road traffic accidents. The account of deaths by cause of death in the Vital Statistics is based on the death certificate and includes people who are permanently resident in Denmark, and who have died in Denmark or abroad. In connection with deaths caused by road traffic accidents, the statistics also include people who have died within 30 days of the accident as well as people who have died abroad, while foreigners who have died in Denmark are not included. An actual pooling of data for the years 1995-96 has shown that there is a fine congruity between the two registers.

The yearly statistics is comparable with the yearly tables from the Road Directorate.

#### 7.4 Coherence - internal

Not relevant for these statistics.

## 8 Accessibility and clarity

Statistics appear in:

- News from Statistics Denmark.
- Annual publications: Statistical Yearbook, Statistical 10-Year Review and Færdselsuheld (Road Traffic Accidents).
- <u>Statbank</u>.Transport, Traffic accidents: UHELD1, UHELDK1, UHELD2, UHELDK2, UHELD3, UHELD4, UHELD5, UHELD6, UHELD7, UHELDK7, UHELD8, UHELD10, UHELD11, UHELD12, UHELD13, MOERKE.

#### 8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

#### 8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

#### 8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

#### 8.4 News release

Yearly is a news release published.



#### 8.5 Publications

Yearly is tables in the publication Statistical Yearbook published <u>publikationer</u>.

#### 8.6 On-line database

Statbank.

#### 8.7 Micro-data access

In the Road Traffic Accident Statistical Register, the edited basic information at accident, element and personal level for all accidents involving casualties is stored. The register can be used for pooling with other registers based on CPR numbers.

#### 8.8 Other

The Danish road agency deliver yearly data to DST (CARE-database). DST transfer the data to Eurostat.

## 8.9 Confidentiality - policy

Policy of confidence.

## 8.10 Confidentiality - data treatment

### Policy of confidence.

No information at the individual level is given. Names, identity number or other information which make it possible to identify person is anonymized.

### 8.11 Documentation on methodology

A detailed description of the method can be found in the publication about <u>Road Traffic Accidents</u>. The content of the Road Traffic Accident Statistical Register is documented in Statistics Denmark's documentation system (TIMES).

Also see Homepage Road Directorate homepage.

## 8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

#### 9 Contact

The administrative placement of these statistic are in the division of Population and Education. The person responsible is Henning Christiansen, tel. +45 39 17 33 05, e-mail: hch@dst.dk

## 9.1 Contact organisation

**Statistics Denmark** 

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